



AI-1348

B. C. A. (Part-III)

Term End Examination, 2020-21

Paper : Fifth

INTRODUCTION TO RDBMS (ORACLE)

Time Allowed : Three hours

Maximum Marks : 100

Minimum Pass Marks : 33

Note : Answer all questions. All questions carry equal marks.

Unit-I

1. (a) Explain Network approaches.
- (b) What do you understand by DBMS? Explain their access methods.

Or

- (a) Explain the different kinds of DBMS users.

- (b) Explain different type of data models.

Unit-II

2. (a) What do you mean by keys? Explain their types in detail.
- (b) How to convert ER-Model into relational schema.

Or

- (a) What is ER-Model? Explain entities attributes and relationship with diagram or flowchart.
- (b) Make an ER-diagram for school management system.

Unit-III

3. (a) Write differnt types of join statement with example for each.
- (b) Write the relational algebra query for the following statements.
 - (i) Selection of all customers from an account relation who lives in Mumbai and have balance > 20,000.

- (ii) Selection of name and roll number of all students in a library relation who lives in Mumbai and have atleast one book issued.

Or

- (a) Explain integrity constraints with examples.
 (b) Explain simple and complex queries using relational algebra.

Unit-IV

4. (a) Explain normalization concept in logical model.
 (b) What is BCNF and 3NF.

Or

- (a) Explain pitfalls in Database design with examples.
 (b) Compare 4NF and 5NF.

Unit-V

5. (a) Explain SQL and its environment.

- (b) Describe SQL constructs like SELECT, FROM, WHERE, GROUP BY, HAVING, ORDER BY.

Or

- (a) Explain SQL as data manipulation language :

- (i) Inserting data in a table
 (ii) Deleting data in a table
 (iii) Retrieving data in a table.
 (iv) Updating data in a table.

- (b) Give any five clauses that can be used with select statement.